

ACANTHUS

An international newsletter to encourage interest in the Acanthaceae

Editor: T. F. Daniel, Department of Botany, California Academy of Sciences,
Golden Gate Park, San Francisco, CA 94118, U.S.A.

Number 3

December 1988

Additions to Directory

- BALKWILL, Mandy-Jane, c/o Botany Department, University of the Witwatersrand, P.O. WITS, 2050 Johannesburg, South Africa
BANTA, John, 17010 North River Road, Alva, Florida 33920, U.S.A.
HILSENBECK, Richard, Department of Biology, Sul Ross State University, Alpine, Texas 79832, U.S.A.

Recent Literature (1987)

- BALKWILL, K., M.-J. CADMAN & F.M. GETLIFFE NORRIS. 1987. *Dicliptera capensis*. Flowering Plants of Africa 49: pl. 1952.
DANIEL, M. & S.D. SABNIS. 1987. Chemosystematics of some Indian members of the Acanthaceae. Proc. Indian Acad. Sci., Pl. Sci. 97: 315-323.
DURKEE, L.T. 1987. Ultrastructure of extrafloral nectaries in *Aphelandra* spp. (Acanthaceae). Proc. Iowa Acad. Sci. 94(3): 78-83.
EDWARDS, T.J. & F.G. NORRIS. 1987. Taxonomic studies in the Acanthaceae: a new species of *Asystasia*. S. Afr. J. Bot. 53: 231-233.
FRYXELL, P.A. & S.D. KOCH. 1987. New or noteworthy species of flowering plants from the Sierra Madre del Sur of Guerrero and Michoacan, Mexico. Aliso 11: 539-561.
HANSEN, B. 1987. *Justicia* sect. *Grossa* sect. nov. Acanthaceae. Nordic J. Bot. 7: 505-509.
LOWREY, T.K. & D.J. CRAWFORD. 1987. Electrophoretic confirmation of the intergeneric hybrid *xRuttyruspolia* (Acanthaceae). Pl. Syst. Evol. 158: 29-35.
MUNDAY, J. 1987. A new species of *Monechma* (Acanthaceae) from South West Africa: Namibia. S. Afr. J. Bot. 53: 140-142.
RAMAMOORTHY, T.P. & D.H. LORENCE. 1987. Species vicariance in the Mexican flora and description of a new species of *Salvia* (Lamiaceae). Bull. Mus. Nation. Hist. Nat., B, Adansonia 9: 167-175.
SAGGOO, M.I.S. & S.S. BIR. 1986. Meiotic studies in certain members of family Acanthaceae from south India. J. Indian Bot. Soc. 65: 310-315.
WAGNER, W.L., D.R. HERBST, & S.H. SOHMER. 1986. Contributions to the Flora of Hawai'i I. Acanthaceae-Asteraceae. Bishop Mus. Occ. Papers 26: 102-122.
WASSHAUSEN, D.C. 1987. New and interesting species of Acanthaceae from Ecuador. Opera Bot. 92:265-275.

Recent Publications of Interest

- CARLQUIST, S. & S. ZONA. 1988. Wood anatomy of Acanthaceae: a survey. Aliso 12: 201-227.
GRAHAM, V.A. 1988. Delimitation and infra-generic classification of *Justicia* (Acanthaceae). Kew Bull. 43: 551-624.
(to be reviewed in the next ACANTHUS).

The Spelling of the Latin Name for the Shrimp Plant: *Justicia*
brandegeana Wassh. & L.B. Smith

The so-called Shrimp Plant, one of the most commonly cultivated Acanthaceae, was first described as *Beloperone guttata* by T.S. Brandegee in Univ. Calif. Publ. Bot. 4: 278 (1912) among many new species from Mexico collected by Dr. C.A. Purpus. Recent authors have included *Beloperone* in *Justicia*, but the epithet *guttata* was already used in the latter genus as early as 1830 for a very different plant from Asia. In their account of Acanthaceae in P.R. Reitz's *Flora Illustrada Catarinense* in 1969, Dieter Wasshausen and Lyman Smith therefore published a new name for the species (which is cultivated in Brazil) giving it as *Justicia brandegeana*, clearly honouring Townshend Stith Brandegee, 1843-1925, the original author of the species. In creating the epithet they no doubt deliberately dropped the second 'e' from Brandegee's name.

In the International Code, Recommendation 73 C.1.(c) states that, "If the personal name ends in a vowel, adjectival epithets are formed by adding -an plus the nominative singular inflection appropriate to the gender of the generic name." I think it is implicit that one should make this addition to the whole of the personal name concerned, in this case Brandegee. Deletion of the final 'e' is not permissible, as is made clear by the example of *Zygophyllum billardierei* DC. under Article 73.7 with a cross-reference to Article 73.10. And although the quotation above is from a Recommendation rather than an Article, the fact that Article 73.10 says that terminations contrary to the Recommendation have to be 'corrected' makes it compulsory, as is well known. I conclude that the name should be cited as *Justicia brandegeana* Wassh. & L.B. Smith in Fl. Illustr. Catar. 1, Acantac.: 102 (1969), as '*brandegeana*.' To my mind, this spelling which reflects the spelling of Brandegee's name is more pleasing than the original spelling of the epithet. I have used it for some time, and on my recommendation it was adopted in Vicky Smith's paper on *Justicia* in Kew Bull. 43: 608 (1988).

Another question concerns pronunciation of the epithet. Tom Daniel informs me that long-standing tradition in San Francisco, going back to those who knew T.S. Brandegee and his botanist wife, is that the 'g' is hard. The epithet should therefore, I think, also be pronounced with a hard 'g.'

-R.K. Brummitt

Justicia brandegeana vs. *J. brandegeana*, Another View

Dick Brummitt raises an interesting question in the above note. It is not without some reservations that I propose a course at variance with his conclusions. I will attempt to provide a rationale for why the ICBN permits, if not requires, the retention of the original spelling (i.e., *Justicia brandegeana*) in this instance, however.

The applicable portions of the ICBN are, in my opinion, Articles 23.2 ("The epithet in the name of a species may be taken from any source whatever, and may even be composed arbitrarily ..."), 73.1 ("The original spelling of a name or epithet is to be retained, except for the correction of typographic or orthographic errors..."), and 73.3 ("The liberty of correcting a name is to be used with reserve..."). Concerning the addition of letters in forming an adjectival epithet, Brummitt notes that, "it is implicit that one should make this addition to the whole of the personal name concerned..." Such a course would certainly be in keeping with the spirit of Recommendation 73E but, unlike 73C.1, this particular Recommendation is not compulsory. In fact, Article 73.7 Ex. 9 shows changes made in orthography (e.g., deletion of letters) by authors who adopted personal names as epithets that are to be preserved (e.g., *Valantia* L. commemorating Vaillant is not to be altered to *Vaillantia*). Brummitt further notes that deletion of the final 'e' in Brandegee's name is not permissible under Article 73.7. Unfortunately, we do not really know whether the final 'e' or the 'e' in the next to last position in the name was deleted by the authors. In keeping with the spirit and letter of the ICBN (especially the three articles noted above), I believe that one should argue that, for whatever reason, the authors of the new name chose to alter the spelling of Brandegee's name (i.e., dropping the 'e' in nonfinal position, which is permissible under the ICBN but not recommended) before adding the correct termination. Since there is neither typographic nor orthographic error, Article 73.1 necessitates that the original spelling (i.e., *J. brandegeana*) be retained.

-T.F. Daniel

A Checklist of Acanthaceae in Costa Rica, Nicaragua, and Panama.

Below is a checklist of species of Acanthaceae in Costa Rica, Nicaragua, and Panama. Introduced species are indicated by an asterisk and endemic species are indicated by the letter "e". Total genera and species for each country are given at the end of the list. For the three countries combined there are 45 genera and 165 species.

-L.H. Durkee

	C.R.	Nic.	Pan.		C.R.	Nic.	Pan.
<i>Acanthus</i>							
<i>mollis</i> L.	+			<i>gracilis</i> Leonard			+e
<i>Aphelandra</i>				<i>imbricata</i> Leonard	+		+
<i>arnoldii</i> Mildbr.			+	<i>iopus</i> Lindau	+		+
<i>aurantiaca</i> (Sch.) Lindl.	+		+	<i>pallida</i> Leonard	+e		
<i>campanensis</i> Durkee	+		+	<i>podocephala</i> J. Smith	+		
<i>crenata</i> Leonard			+	<i>sciadephora</i> J. Smith		+	
<i>darienensis</i> Wasshausen			+e	<i>skutchii</i> Leonard	+		
<i>dolicantha</i> J. Smith	+		+	<i>trifurca</i> Oerst.	+		+
<i>dukei</i> Wasshausen			+e	<i>unguiculata</i> Nees	+	+	
<i>golfodulcensis</i> McDade	+	+	+	<i>vahlana</i> Nees			+
<i>gracilis</i> Leonard			+	<i>Dyschoriste</i>			
<i>hartwegiana</i> Nees	+			<i>quadrangularis</i> Oerst.		+	
<i>laxa</i> Durkee			+e	<i>valeriana</i> Leonard	+		+
<i>leonardii</i> McDade	+		+	<i>Elytraria</i>			
<i>lingua-bovis</i> Leonard	+		+	<i>imbricata</i> (Vahl) Pers.	+	+	+
<i>pilosa</i> Leonard			+	<i>Graptophyllum</i>			
<i>scabra</i> (Vahl) Smith	+	+	+	<i>*pictum</i> (L.) Griff.	+	+	+
<i>seibertii</i> Leonard	+		+	<i>Habracanthus</i>			
<i>sinclairiana</i> Nees	+		+	<i>silvaticus</i> Nees	+		+
<i>storkii</i> Leonard	+e			<i>Hansteinia</i>			
<i>terryae</i> Standley			+	<i>blepharorrhachis</i> (Lin.) Dur.	+e		
<i>tonduzii</i> Leonard	+		+	<i>gracilis</i> Oerst.	+		
<i>tridentata</i> Hemsley	+	+		<i>reflexiflora</i> Leonard			+e
<i>Asystasia</i>				<i>sessilifolia</i> (Oerst.) Dur.	+e		
<i>*gangetica</i> (L.) Anders.	+	+	+	<i>stricta</i> (Leonard) D. Gibs.	+e		
<i>Barleria</i>				<i>ventricosa</i> (J. Sm.) D. Gib.	+		+
<i>micans</i> Nees	+	+	+	<i>Hemigraphis</i>			
<i>Blechum</i>				<i>*alternata</i> N. Burm.		+	+
<i>brownei</i> Juss.	+	+	+	<i>Henrya</i>			
<i>costaricense</i> Oerst.	+	+	+	<i>scorpioides</i> Nees	+	+	
<i>grandiflorum</i> Oerst.		+		<i>Herpetacanthus</i>			
<i>panamense</i> Lindau			+e	<i>panamensis</i> Leonard	+	+	+
<i>Bravaisia</i>				<i>Hygrophila</i>			
<i>integerrima</i> (Spr.) Stand.	+	+	+	<i>costata</i> Nees	+	+	+
<i>Bucurgenia</i>				<i>Hypoestes</i>			
<i>glandulosa</i> Leonard	+	+		<i>*phyllostachya</i> Baker	+		
<i>Carlowrightia</i>				<i>Justicia</i>			
<i>arizonica</i> A. Gray	+	+		<i>adhatoda</i> L.			+e
<i>Chaetochlamys</i>				<i>allenii</i> (Leonard) Durkee			+e
<i>panamensis</i> Lindau	+		+	<i>angustibracteata</i> Leonard	+e		
<i>Chaetothylax</i>				<i>aurea</i> Schlecht.	+	+	+
<i>leucanthus</i> Leonard	+		+	<i>betonica</i> L.			+
<i>rothschuhii</i> Lindau		+		<i>*brandegeana</i> Wassh. & Smith	+	+	
<i>Chamaeranthemum</i>				<i>brenesii</i> (Leonard) D. Gibs.	+e		
<i>durandii</i> Leonard	+			<i>candelariae</i> (Oerst.) Leon.	+	+	
<i>tonduzii</i> Lindau	+			<i>carthaginensis</i> Jacq.	+	+	+
<i>Dicliptera</i>				<i>chamaephyton</i> D. Gibson	+		+

	C.R.	Nic.	Pan.		C.R.	Nic.	Pan.
<i>comata</i> (L.) Lam.	+	+	+	<i>Razisea</i>			
<i>costaricana</i> Leonard	+e			<i>citrina</i> D. Gibson	+e		
<i>crenata</i> (Leonard) Durkee	+	+	+	<i>spicata</i> Oerst.	+	+	+
<i>ephemera</i> Leonard	+		+	<i>wilburii</i> McDade	+e		
<i>graciliflora</i> (Stan.) Gibs.			+e	<i>Ruellia</i>			
<i>macrantha</i> Benth.	+	+	+	<i>anthracina</i> Leonard			+e
<i>metallica</i> Lindau	+	+	+	<i>barbillana</i> Cufodontis	+		
<i>oerstedii</i> Leonard	+		+	<i>biolleyi</i> Lindau	+	+	+
<i>orosiensis</i> Durkee	+e			<i>colonensis</i> Wasshausen			+e
<i>panamense</i> Durkee			+e	<i>cooperi</i> Leonard	+		+
<i>pectoralis</i> Jacq.	+	+	+	<i>fulgida</i> Andr.			+
<i>pittieri</i> Lindau	+		+	<i>geminiflora</i> Kunth	+	+	+
<i>refractifolia</i> (Ktze.) Leon.	+	+	+	<i>golfodulcensis</i> Durkee	+e		
<i>sarapiquensis</i> McDade	+e			<i>hookeriana</i> (Nees) Hemsl.		+	
<i>secunda</i> Vahl			+	<i>inundata</i> Kunth	+	+	+
<i>skutchii</i> Leonard	+e			<i>jussieuoides</i> Schlecht.	+	+	
<i>spicigera</i> Schlecht.	+	+		<i>leucobracteatus</i> Durkee			+e
<i>tinctoria</i> (Oerst.) D. Gibs.	+	+	+	<i>macrophylla</i> Vahl			+
<i>tonduzii</i> Lindau	+e			<i>malacosperma</i> Greenm.	+		+
<i>trichotoma</i> (Ktze.) Leonard	+		+	<i>matagalpae</i> Lindau		+	
<i>urophylla</i> (Lind.) D. Gibs.	+		+	<i>metallica</i> Leonard	+	+	+
<i>valerii</i> Leonard	+e			<i>nudiflora</i> (Eng. & Gr.) Urb.	+	+	+
<i>Kalbreyeriella</i>				<i>palustris</i> Durkee	+e		
<i>rostellata</i> Lindau			+	<i>paniculata</i> L.	+	+	+
<i>Louteridium</i>				<i>pereducta</i> Standley		+	
<i>costaricense</i> Radlk.	+	+	+	<i>pittieri</i> Lindau	+		+
<i>donnell-smithii</i> S. Wats.		+		<i>praeclara</i> Standley	+		+
<i>Megaskepasma</i>				<i>pygmaea</i> J. Smith		+	
<i>*erythroclamys</i> Lindau	+	+	+	<i>standleyi</i> Leonard		+	
<i>Mendoncia</i>				<i>stemonacanthoides</i> (Oe.) Hem.	+	+	
<i>brenesii</i> Standl. & Leonard	+		+	<i>tonduzii</i> Lindau	+		+
<i>cordata</i> Leonard			+	<i>tubiflora</i> H.B.K.	+	+	+
<i>costaricana</i> Oerst.	+		+	<i>Sanchezia</i>			
<i>gracilis</i> Turrill	+		+	<i>*parvibracteata</i> Spr. & Hut.	+	+	
<i>hirsuta</i> (Poep. & End.) Nees			+	<i>pennellii</i> Leonard			+
<i>lindavii</i> Rusby	+	+	+	<i>Siphonoglossa</i>			
<i>litoralis</i> Leonard			+	<i>sessilis</i> (Jacq.) D. Gibson		+	
<i>retusa</i> Turrill	+	+	+	<i>Spathacanthus</i>			
<i>tonduzii</i> Turrill	+	+	+	<i>hoffmannii</i> Lindau	+e		
<i>Nelsonia</i>				<i>Staurogyne</i>			
<i>canescens</i> (Lam.) Spreng.	+	+	+	<i>agrestis</i> Leonard			+e
<i>Neriacanthus</i>				<i>Stenandrium</i>			
<i>grandiflora</i> Leonard			+	<i>pedunculatum</i> (Smith) Leon.		+	
<i>Odontonema</i>				<i>Streblacanthus</i>			
<i>microphyllus</i> Durkee			+e	<i>monospermus</i> Kuntze	+e		
<i>tubiforme</i> (Bertol.) Kuntze	+	+	+	<i>Teliostachya</i>			
<i>Pachystachys</i>				<i>alopécuroidea</i> (Vahl) Nees	+	+	+
<i>*lutea</i> Nees	+	+	+	<i>Tetramerium</i>			
<i>Poikilacanthus</i>				<i>nemorum</i> T. Brandegees		+	
<i>macranthus</i> Lindau	+	+		<i>nervosum</i> Nees	+	+	+
<i>Pseuderanthemum</i>				<i>Thunbergia</i>			
<i>alatum</i> (Nees) Radlk.		+		<i>*alata</i> Bojer	+	+	+
<i>*atropurpureum</i> (Bull) Bail.	+	+	+	<i>*erecta</i> (Benth.) T. Anders.	+	+	+
<i>cordatum</i> (Nees) Radlk.			+e	<i>*fragrans</i> Roxb.	+	+	+
<i>cuspidatum</i> (Nees) Radlk.	+	+	+	<i>*grandiflora</i> Roxb.	+	+	+
<i>pittieri</i> Leonard	+e			<i>*mysorensis</i> (Wight) Anders.	+		
<i>praecox</i> (Benth.) Leonard	+	+		<i>Trichanthera</i>			
<i>standleyi</i> Leonard	+	+	+	<i>gigantea</i> (Hum. & Bon.) Nees	+		+
				TOTAL GENERA	39	34	34
				TOTAL SPECIES	119	73	109